PTC/SB/08a/b (08-03)
Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

of

Substitute for form 1449A/B/PTO

1

Sheet

(Use as many sheets as necessary)

1

Application Number 10/623666 Filing Date July 21, 2003 First Named Inventor Claes BJORKMAN Art Unit 2874 S. U. Song Examiner Name 0107262.00202US1 Attomey Docket Number

Complete if Known

			U.S. PA	TENT DOCUMENTS	
Examinar	C#o	Document Number	Publication Date		Pages, Columns, Lines, Where
tritials* No.1	Number-Kind Code ² (if known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Releva Figures Appear	
3118		US-2002/0146865 A1	10-2002	Hoel, Jeffrey H.	
CILD		US-2004/0012041 A1	10-2002	King et al.	
QUE		US-4,966,430	10-1990	Weidel, Edgar	
OUR		US-5,098,861	03-1992	Blackstone, Scott C.	
818 X		US-5,195,161	03-1993	Adar et al.	
ens		US-5,485,021	01-1996	Abe, Takao	

		FOREIG	GN PATENT I	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁴ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
						Н

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.usplc.gov or MPEP 901.04. *Senter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), votume-issue number(s), publisher, city and/or country where published.	T⁰
Ello	AA	Janz et al.(1998) "Optical Properties of Pseudomorphic Si1-xGex for Si-Based Waveguides at the λ=1300-nm and 1550-nm Telecommunications Wavelength Bands". <i>IEEE Journal of Selected Topics in Quantum Electronics</i> . Vol. 4 (6)	
au	AB	Schuppert et al. (1989) "Optical Channel Waveguides in Silicon Diffused from GeSi Alloy". Electronics Letters. Vol. 25 (22)	
8US	AC	Soref et al. (1991) "Large Single-Mode Rib Waveguides in GeSi-Si and Si-on-SiO2" IEEE Journal of Quantum Electronics. Vol. 27 (8)	
Nis	AD	Soref et al. (1990) "Optical Waveguiding in a Single-crystal Layer of Germanium Silicon Grown on Silicon" Optics Letters. Vol. 15(5)	
nes	AE	Splett et al. (1990) "Low Loss Optical Ridge Waveguides in a Strained GeSi Epitaxial Layer Grown on Silicon". Electronics Letters. Vol. 26(14)	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<u> </u>		
Examiner / c /	Date	
Signature Mila h M. I mad		
Signature Sulah Mand	Considered /4 0C7	(/>
· 0		

^{&#}x27;Applicant's unique citation designation number (optional). *Applicant is to place a check mark here if English language Translation is attached.

Subter or, PTO-1449

Sheet

INFORMATION DISCLOSURE IN AN APPLICATION

(Use several sheets if necessary)

OF

4

Docket Number

107262.180 US1

--10/280,505

Applicant

Bjorkman et al.

Filing Date

Group Art Unit

2874

		U	S. Patent Documen	ts		
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
5118	3,217,856	Nov 16, 1965	G.T. Miles	197	127	Mar 28, 1963
8118	4,006,432	Feb 1, 1977	Streifer et al.	331	94.5 C	Oct 15, 1974
8118	4,100,562	Jul 11, 1978	Sugawara et al.	357	19	Apr 19, 1976
8Us	4,368,481	Jan 11, 1983	Ohashi et al.	357	30	Jun 10, 1980
848	4,438,447	Mar 20, 1984	Copeland, III et al.	357	19	Jan 18, 1982
sur	4,720,468	Jan 19, 1988	Menigaux et al.	437	129	Mar 29, 1985
84	4,734,910	Mar 29, 1988	Izadpanah	372	18	Mar 25, 1987
8W	4,759,023	Jul 19, 1988	Yamaguchi	372	26	Jan 6, 1986
ach	4,959,540	Sep 25, 1990	Fan et al.	250	227.12	May 15, 1989
sut	4,980,568	Dec 25, 1990	Merrick et al.	250	551	May 22, 1989
nu	5,190,883	Mar 2, 1993	Menigaux et al.	437	3	May 16, 1991
out	5,291,010	Mar 1, 1994	Tsuji	250	208.1	Oct 3, 1991
eut	5,193,131	Mar 9, 1993	Bruno	385	. 14	Apr 28, 1992
me	5,298,787	Mar 29, 1994	Bozler et al.	257	592	Apr 1, 1991
ons.	5,345,557	Sep 6, 1994	Wendt	395	200	Oct 4, 1989
8Nr	5,357,122	Oct 18, 1994	Okubora et al.	257	84	Sep 2, 1992
out	5,382,810	Jan 17, 1995	Isaksson	257	81	Feb 4, 1992
8NG	5,463,229	Oct 31, 1995	Takase et al.	257	59	Apr 7, 1994
ous	5,523,557	Jun 4, 1996	Bruno	250	214.1	Apr 26, 1995
SW	5,536,974	Jul 16, 1996	Nishiguchi	257	778	May 21, 1993
Rus	5,548,433	Aug 20, 1996	Smith	359	158	Apr 26, 1993
Ruf	5,569,934	Oct 29, 1996	Fujii et al.	257	21	Sep 28, 1995
our	5,604,361	Feb 18, 1997	Isaksson	257	99	Oct 24, 1995
Auf	5,633,527	May 27, 1997	Lear	257	432	Feb 6, 1995
nu	5,663,592	Sep 2, 1997	Miyazawa et al.	257	627	Jul 20, 1995
800	5,728,605.	Mar 17, 1998	Mizutani	438	41	Dec 19, 1996
Out	5,767,508	Jun 16, 1998	Masui et al.	250	227.11	May 23, 1996
Rue 1	5,801,872	Sep 1, 1998	Tsuji	359	248	Feb 7, 1996

EXAMINER		
	0 1	1
	was	y sind

DATE CONSIDERED

14 000 05

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.

10/623666

Subt. For, PTO-1449

NFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 107262.180 US1

Application Number

~10/280,505_

Applicant

₿jorkman et al.

Filing Date

Group Art Unit

Sheet	2	OF	4	October	October 25, 2002 28		
8U8	5,812,708	Sep 22,	1998	Rao	385	14	Dec 31, 1

848	5,812,708	Sep 22, 1998	Rao	385	14	Dec 31, 1996`
Sus	5,825,051	Oct 20, 1998	Bauer et al.	257	82	Sep 12, 1997
sus	5,828,679	Oct 27, 1998	Fisher	372	6	Jul 23, 1997
sus	5,854,804	Dec 29, 1998	Winer et al.	372	38	Dec 13, 1996
844	5,889,903	Mar 30, 1999	· Rao	385	14	May 14, 1998
8UP	5,945,720	Aug 31, 1999	Itatani et al.	257	432	Jul 25, 1997
ne	5,946,438	Aug 31, 1999	Minot et al.	385	88	Nov 26, 1997
SUP	5,970,081	Oct 19, 1999	Hirayama et al.	372	96	Sep 17, 1997
848	6,011,296	Jan 4, 2000	Hassard et al.	257	448	Aug 30, 1996
She	6,031,243	Feb 29, 2000	Taylor	257	13	Oct 14, 1997
SUF	6,043,515	Mar 28, 2000	Kamiguchi et al.	257	103	Sep 16, 1997
nut	6,066,860	May 23, 2000	Katayama et al.	257	71	Dec 23, 1998
Mr	6,093,939	Jul 25, 2000	Artigue et al.	257	99	Feb 24, 1998
ens	6,125,217	Sep 26, 2000	Paniccia et al.	385	14	Jun 26, 1998
Ris	6,202,165 B1	Mar 13, 2001	Pine	713	500	Jul 23, 1998
ris	6,232,142 B1	May 15, 2001	Yasukawa	438	69	Dec 4, 1998
8U	6,288,410 B1	Sep 11, 2001	Miyazawa	257	14	Oct 6, 1997
820	6,310,372 B1	Oct 30, 2001	Katayama et al.	257	291	Mar 21, 2000
8US	6,318,901 B1	Nov 20, 2001	Heremans et al.	385	53	Jul 26, 1999
8Ul	6,320,204 B1	Nov 20, 2001	Hirabayashi et al.	257	71	Jan 28, 2000
Pry	6,343,171 B1	Jan 29, 2002	Yoshimura et al.	385	50	Apr 20, 1999
Sus	6,346,717 B1	Feb 12, 2002	Kawata	257	72	Jan 4, 1999
RU	6,392,342 B1	May 21, 2002	Parikka	313	512	Dec 9, 1999
eris	6,393,183 B1	May 21, 2002	Worley	385 ·	39	Aug 17, 1999
Au	6,403,395 B2	Jun 11, 2002	Hirabayashi et al.	438	69	Aug 28, 2001
NY	6,407,438 B1	Jun 18, 2002	Sevem	257	433	Apr 30, 1998
ยน	6,528,799 B1	Mar 4, 2003	Franz et al.	250	214.1	Mar 22, 1999

EXAMINER	DATE CONSIDERED				
Sarah y Song	14 001 05				
EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.					

10/623666

Subt. For, PTO-1449 Application Number **Docket Number** 107262.180 US1 - 10/280,505 FORMATION DISCLOSURE (N) AN APPLICATION Applicant Bjorkman et al. several sheets if necessary Filing Date Group Art Unit OF 3 4 October 25, 2002 2874

	· ,	U.S. Patent	Application Pub	olications		
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
844	2002/0174826 A1	Nov 28, 2002	Maydan et al.	117	84	May 24, 2001
· Suf	2002/0174827 A1	Nov 28, 2002	Samoilov et al.	117	84	Dec 11, 2001
ny	2003/0015720 A1	Jan 23, 2003	Lian et al.	257	98	Jul 18, 2001
ens.	2003/0025118 A1	Feb 6, 2003	Yamazaki et al.	257	79	Jul 22, 2002
NG	2003/0052082 A1	Mar 20, 2003	Khan et al.	216	24	Sep 19, 2001
err	2003/0052088 A1	Mar 20, 2003	Khan et al.	216	67	Sep 19, 2001
ry	2003/0072548 A1	Apr 17, 2003	Bhardwaj et al.	385	129	Oct 12, 2001
nu	2003/0110808 A1	Jun 19, 2003	M'Saad et al.	65	379	Dec 14, 2001
ny	2003/0113085 A1	Jun 19, 2003	M'Saad	385	129	Dec 14, 2001
Pur	2003/0114006 A1	Jun 19, 2003	White	438	694	Dec 17, 2001

Foreign Patent Documents							
EXAMINER INITIAL	DOCUMENT NUMBER	~ DATE	COUNTRY	CLASS	SUBCLASS	TRANS	LATION NO
ny	WO 03/036369 A1	May 1, 2003	PCT			169	NO

		Other Documents (Including Author, Title, Date, Pertinent Pages, Etc.)
ens	A	Chen et al., "Fully Embedded Board-Level Guided-Wave Optoelectronic Interconnects," Proceedings of the IEEE, Vol. 88, No. 6, June 2000, pp. 780-793
ay	В	Choi et al., "Self-Aligning Silicon Groove Technology Platform for the Low Cost Optical Module," 1999 Electronic Components and Technology Conference, IEEE, 1999, pp. 1140-1144
fu	С	Irace et al., "Fast Silicon-on-Silicon Optoelectronic Router Based on a BMFET Device," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 6, No. 1, January/February 2000, pp. 14-18
PUS	D	Jalali et al., "Advances in Silicon-on-Insulator Optoelectronics," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 6, November/December 1998, pp. 938-947

EXAMINER	DATE CONSIDERED
Sarah y Sond	14 007 05
EXAMINER: Initial if citation is considered, whether or not citation if not conformance and not considered. Include conv. with	

10/623666

Subt. For, PTO-1449

Docket Number 107262.180 US1

INFORMATION DISCLOSURE 107262.180 US1

IN AN APPLICATION

Applicant Bjorkman et al.

Filing Date Group Art Unit

Sheet 4 OF 4 October 25, 2002 2874

8118	Е	Kimerling, "Photons to the Rescue: Microelectronics Becomes Microphotonics," The Electrochemical Society Interface, Summer 2000, pp. 28-31
Ry	F	Kostal, "Nano-optics Changes the Rules for Optical Components," NanoOpto White Paper 2002.001, June 2002, pp. 1-6
848	G	Kostal and Park, "Nano-optics: New Rules for Optical System Design," NanoOpto White Paper 2002.002, June 2002, pp. 1-10
sus	н	Motorola Labs, "The Discovery: Motorola Labs solves a 30-year semiconductor industry puzzle," June 2002
RUS	I	Schaub et al., "High-Speed Monolithic Silicon Photoreceivers on High Resistivity and SOI Substrates," Journal of Lightwave Technology, Vol. 19, No. 2, February 2001, pp. 272-278
814	J	Yabu et al., "New Design Method for Low-Loss Y-Branch Waveguides," Journal of Lightwave Technology, Vol. 19, No. 9, September 2001, pp. 1376-1384
RUS	ĸ	Tashiro et al., "A Selective Epitaxial SiGe/Si Planar Photodetector for Si-Based OEIC's," IEEE Transactions on Electronic Devices, Vol. 44, No. 4, April 1997, pp. 545-550
eur	L	Walker and Jahns, "Optical clock distribution using integrated free-space optics," Optics Communications 90 (1992) pp. 359-371
RUS	М	Walker et al., "Design and fabrication of high-efficiency beam splitters and beam deflectors for integrated planar micro-optic systems," Applied Optics, Vol. 32, No. 14, May 10, 1993, pp. 2494-2501

EXAMINER	DATE CONSIDERED
Sarahy long	14 007 05

EXAMINER: Initial if citation is considered, whether or not citation is in conformanc with MPEP § 609: Draw Line through citation if not conformance and not considered. Include copy with next communication to applicant.